

REMARKS/ARGUMENTS

Responsive to the Official Action mailed February 24, 2005, applicants have revised the claims of their application in an earnest effort to place this case in condition for allowance. Specifically, independent claims 1, 2, and 3 have been amended, and new dependent claims 4 and 5 added. Reconsideration is respectfully requested.

As discussed in the Specification, the present invention is directed to disposable absorbent articles which include an improved compound barrier fabric construct. Significantly, disposable absorbent articles embodying the present invention can be economically manufactured, since the compound barrier fabric construct of the present invention can be economically formed, and incorporated in such articles.

In the Action, the Examiner has rejected the pending claims under 35 U.S.C. §103, with reliance upon U.S. Patent No. 6,117,800, to Seibert et al. However, applicants must respectfully note that this reference is fundamentally deficient in teaching or suggesting the present invention, in that this reference is specifically limited in its teachings to formation of a surgical gown material from *woven fabric*, and thus does not teach or suggest applicants' novel construct, including a *nonwoven fabric* nano-denier barrier layer, which is provided in combination with a secondary barrier layer, and an associated nonwoven fabric substrate layer. Accordingly, the Examiner's rejection is respectfully traversed.

At column 2, lines 1 *et seq.* of Seibert et al., the disclosed gown material is described:

The material 10 has a two-ply laminated core 11 sandwiched between an outer layer of microdenier, polyester, *woven fabric* 13 adhered to one side of the core 11 and an outer layer of knitted, polyester fabric 14 adhered to the opposite side of the core.

It is additionally noted that this reference is specifically limited in its teachings to *surgical gown material*, and has no teachings or suggestion that the material disclosed therein should be employed in a disposable *absorbent* article. As will be recognized by those familiar with the art, disposable absorbent articles, of necessity, must be economically fabricated if they are to find acceptance with consumers, while at the same time providing desired levels of liquid impermeability and vapor permeability. Typically, *woven materials*, to which the teachings of Seibert et al. are specifically limited, have not found use in disposable absorbent articles, in view of the relatively high cost associated with use of such woven materials in these types of disposable products.

Thus, applicants must respectfully disagree with the Examiner's assertion that it would be "obvious to one having ordinary skill in the art to incorporate the material of Seibert in an absorbent article", since use of such woven materials in disposable absorbent articles is *contrary* to accepted practice in the design and manufacture of disposable absorbent articles.

As set forth in the pending claims, the novel nonwoven compound barrier fabric of applicants' invention further includes a *nonwoven fabric* substrate layer. Again, there is no teaching or suggestion in the principal Siebert et al. reference of forming a fabric construct in this fashion, much less any teachings of using such a construct in a disposable absorbent article. As discussed in the Specification, a suitable nonwoven fabric substrate layer for use in practicing the present invention may comprise a continuous filament fabric, such as a spunbond nonwoven fabric, or a nonwoven fabric formed from staple length fibers, which can be integrated to provide the desired strength and durability to function as a substrate layer.

As discussed at pages 9 and 10 of the Specification, breathable barrier films can be advantageously combined with the nano-denier nonwoven fabric layer. It is believed that by providing a nano-denier continuous layer upon which a subsequent secondary barrier layer may be deposited, several enhancements of the fabric can be realized. For a given basis weight of the spunbond layer, a fine denier fabric will give a greater number of filaments and a smaller average pore size, per unit area. The smaller average pore size will result in a more uniform deposition of the secondary barrier material onto the nano-denier barrier layer. A more uniform secondary barrier layer will also exhibit fewer weak points in the web at which a failure in barrier performance can occur.

The nano-denier barrier layer also serves to support the secondary barrier layer structurally in the compound nonwoven fabric material. A nano-denier barrier layer provides a smaller average pore size and a larger number of support points for the secondary barrier layer, which results in shorter spans of unsupported secondary barrier material.

By this Amendment, applicants have added new dependent claims 4 and 5, respectively depending from independent claims 1 and 2, which dependent claims specify one preferred embodiment of the present invention, wherein the recited secondary barrier layer is provided in the form of a breathable film.

In view of the foregoing, formal allowance of claims 1-5 is believed to be in order and is respectfully solicited. Should the Examiner wish to speak with applicants' attorneys, they may be reached at the number indicated below.

Application No. 10/666,297
Amendment dated August 24, 2005
Reply to Office Action of February 24, 2005

The Commissioner is hereby authorized to charge any additional fees which may be required in connection with this submission to Deposit Account No. 23-0785.

Respectfully submitted,

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I hereby certify that this paper is being deposited with the United States Postal Service with sufficient postage at First Class Mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450 on **August 24, 2005**.

